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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/609,441	06/30/2003	Hong-Xi Chen	USP2068A-LEC	7359

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EXAMINER

ZHAO, DAQUAN

ART UNIT	PAPER NUMBER
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2621

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/609,441

Applicant(s)

CHEN, HONG-XI

Examiner

Daquan Zhao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 2, 7, 10, 13, 14, 19, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al (US 6,380,978 B1) and further in view of Langer (US 2002/0,102,949 A1).

Regarding claim 1, Adams et al teach a DVD player system for an auto audio system, which comprises a speaker having an audio input (e.g. column 5, lines 22-46, also see figures 1 and 2), comprising:

- a DVD loader for reading storing data stored in a DVD and converting said storing data into a digital audio data and a digital video data (e.g. column 6, lines 21-48);
- a video system comprising a video display unit electrically connected with said DVD loader for converting said video data into a video signal (e.g. figure 3, color liquid crystal display 36, also see figures 1 and 2); and
- a wireless audio system, comprising:
 - (a) an audio signal transmitter electrically connected to said DVD loader to transmit said audio data as an audio

frequency signal (e.g. figure 3, audio & infrared link 32, column 6, lines 40-45); and

Adams et al also teach a wireless head phone in figure 2c, however, Adams et al fails to specify an audio signal receiver, which is adapted for electrically connecting with said audio input of the speaker, wirelessly communicating with said audio signal transmitter for receiving said audio frequency signal therefrom in a wireless manner, thereby, said audio frequency signal is then converted into an acoustical signal through said speaker.

Langer teaches an audio signal receiver, which is adapted for electrically connecting with said audio input of the speaker, wirelessly communicating with said audio signal transmitter for receiving said audio frequency signal therefrom in a wireless manner, thereby, said audio frequency signal is then converted into an acoustical signal through said speaker (e.g. paragraph [011]-[0012], also see figures 1-4). It would have been obvious for one ordinary skill in the art at the time the invention was made to reduce the amount of additional electronic equipment and extensive wiring.

Claim 13 is rejected for the same reasons as discussed in claim 1 above.

Regarding claims 2 and 14, Langer teaches audio signal transmitter comprises a frequency modulation stereo transmitter for transmitting said audio frequency signal within a predetermined frequency range so as to wirelessly connect said DVD loader with said speaker (e.g. figure 2, Modulator 240, paragraph [0011]).

Regarding claims 7 and 19, Adams et al teach an audio signal decoder electrically connected to said audio signal transmitter for decoding said audio data from

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said DVD loader into said audio frequency signal, such that said audio signal transmitter is adapted for wirelessly transmitting said audio frequency signal to said audio signal receiver (e.g. figure 3, MPEG 2 Dolby digital Audio/Video Decoder 28 connects to the Audio & infrared link through the control bus).

Regarding claims 10 and 22, Langer teaches a digital analogue converter electrically connected to said audio signal transmitter for converting said audio data in digital form into an analogue form with a frequency matching with said audio signal receiver (e.g. figure 2, Modulator 240 converts the digital bit into analogue wave form).

2. Claims 3, 4, 5, 6, 8, 9, 11, 12, 15, 16, 17, 18, 20, 21, 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al (US 6,380,978 B1) and Langer (US 2002/0,102,949 A1) as applied to claims 1, 2, 7, 10, 13, 14, 19, 22 above, and further in view of Rosen et al (US 6,014,090).

See the teaching of Adams et al and Langer above.

Regarding claims 3, 4, 5, 6, 15, 16, 17 and 18, Adams et al and Langer fail specify automatically or manually tuned to match the frequency. Rosen et al teach automatically or manually tuned to match the frequency (e.g. column 4, lines 31-43). It would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate the teaching of Rosen et al into the system disclosed by Adams et al and Langer to match the frequency of the transmitter and the receiver to establish the transmission path to reduce the transmission error.

Regarding claims 8, 9, 20 and 21, Adams et al teach an audio signal decoder electrically connected to said audio signal transmitter for decoding said audio data from said DVD loader into said audio frequency signal, such that said audio signal transmitter is adapted for wirelessly transmitting said audio frequency signal to said audio signal receiver (e.g. figure 3, MPEG 2 Dolby digital Audio/Video Decoder 28 connects to the Audio & infrared link through the control bus).

Regarding claims 11, 12, 23, and 24, Langer teaches a digital analogue converter electrically connected to said audio signal transmitter for converting said audio data in digital form into an analogue form with a frequency matching with said audio signal receiver (e.g. figure 2, Modulator 240 converts the digital bit into analogue wave form).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lansang (US 5,794,127); Nakagawa (US 2003/0223604 A1); Honore (US 5,551,065); Wu et al (US 7,046,999 B2); Van Ryzin (US 6,131,130); McCarty et al (US 2004/0234088 A1); Schedivy (US 2004/0086259 A1); Tuccinardi et al (US 6,522,368 B1); Tsai (US 2004/0176130 A1); Bellon (US 5,132,989); Grein et al (US 2001/0033344A1); Angell et al (US 2004/0218766A1); Cheung et al (US 2004/0208325 A1); Matsumura et al (US 5,652,766); Schedivy (US 7,050,124 B2); Streck et al (US 5,012,350); Jani (US 5,655,945).

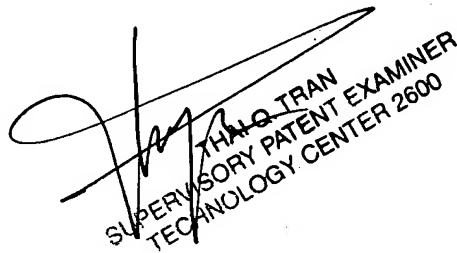
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daquan Zhao whose telephone number is (571) 270-1119. The examiner can normally be reached on M-Fri. 7:30 -5, alt Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Thai Q, can be reached on (571)272-7382. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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